

Form 1449 (Modified)	Atty Docket No. CAMIP005	Application No.: 09/811,283
Information Disclosure Statement By Applicant	Applicant: Ewing et al.	
Use Several Sheets if Necessary)	Filing Date March 15, 2001	Group 1635 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
AK	A1	5,798,275	8/25/98	Kauvar et al.			
AK	A2	5,859,972	1/12/99	Subramaniam et al.			
AK	A3	6,081,766	6/27/00	Chapman et al.			

Foreign Patent or Published Foreign Patent Application

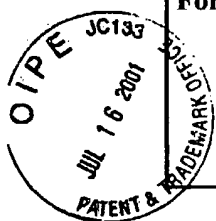
Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
AK	B1	WO 00/08205	02/17/00	PCT				

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK	C1	Karickhoff et al., "Predicting Chemical Reactivity by Computer," Environmental Toxicology and Chemistry, Vol. 10, pp. 1405-1416 (1991)

Examiner <i>Andrew Kennedy</i>	Date Considered <i>Jan. 29, 2004</i>
-----------------------------------	---

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No.	Application No.
	CAMIPOO5	09/811,283
	Applicant:	
	Ewing et al.	
Filing Date	Group	
March 15, 2001	1635 1631	

TECH CENTER 1600/2900
JUL 18 2001

RECEIVED

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	1A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
msy	1B	WO 95/18969	07/13/95	PCT	601N	33/53		
	1C							

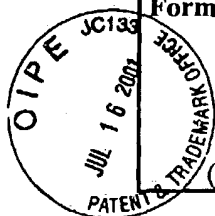
Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
msy	1D	Bradford, M. M., et al., "A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding," ANAL. BIOCHEM., (1976) 72:248-54
msy	1E	Burka, L. T., et al., "Mechanism of Cytochrome P-450 Catalysis. Mechanism of N-Dealkylation and Amine Oxide Deoxygenation," J. AM. CHEM. SOC., (1985) 107:2549-51
msy	1F	Burka, L. T., et al., "Mechanisms of Hydroxylation by Cytochrome P-450: Metabolism of Monohalobenzenes by Phenobarbital-Induced Microsomes," PROC. NATL. ACAD. SCI. USA (1983) 80:6680-4
msy	1G	Cleland, W. W., "Partition Analysis and the Concept of Net Rate Constants as Tools in Enzyme Kinetics," BIOCHEMISTRY, (1975) 14(14):3220-4
msy	1H	Cleland, W. W., "The Use of Isotope Effects to Determine Transition-State Structure for Enzymic Reactions," METHODS ENZYMOL., (1982) 87:625-41
msy	1I	Cupp-Vickery, J.R. et al., "Structure of Cytochrome P450eryF Involved in Erythromycin Biosynthesis," STRUCTURAL BIOLOGY, (1995) 2(2):144-53
msy	1J	Dinnocenzo, J. P., et al., "On Isotope Effects for the Cytochrome P-450 Oxidation of Substituted NN-Dimethylanilines," J. AM. CHEM. SOC., (1993) 115:7111-6
msy	1K	Franchetti, P., et al., "Furanfuran and Thiophenfuran: Two Novel Tiazofuran Analogues. Synthesis, Structure, Antitumor Activity, and Interactions with Inosine Monophosphate Dehydrogenase," J. MED. CHEM., (1995) 38:3829-37
msy	1L	Gonzalez, F. J., et al., "Human Cytochromes P450: Problems and Prospects," TIPS Reviews, (1992) 13:346-52
msy	1M	Gonzalez, F.J., et al., "Expression of Mammalian Cytochrome P450 Using Paccinia Virus," METHODS ENZYMOL., (1991) 206:85-92
Examiner <i>MG Moran</i>		Date Considered <i>4/15/03</i>

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kurdy

Jan 29, 2004



Form 1449 (Modified)	Atty Docket No. CAMIP005	Application No.: 09/811,285
Information Disclosure Statement By Applicant	Applicant: Ewing et al.	
(Use Several Sheets if Necessary)	Filing Date March 15, 2001	Group 1635

RECEIVED

JUL 18 2001

TECH CENTER 600/2900

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	2A						

Foreign Patent or Published Foreign Patent Application

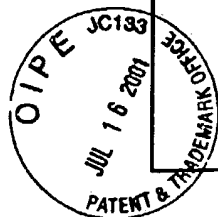
Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation
	2B						Yes No

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
msy	2C	Grogan, J., et al., "Modeling Cyanide Release from Nitriles: Prediction of Cytochrome P450 Mediated Acute Nitrile Toxicity," CHEM. RES. TOXICOL., (1992) 5(4):548-52
msy	2D	Groves, J. T., et al., "Aliphatic Hydroxylation by Highly Purified Liver Microsomal Cytochrome P-450. Evidence for a Carbon Radical Intermediate," BIOCHEMICAL & BIOPHYSICAL RESEARCH COMMUNICATIONS (1978) 81(1):154-60
msy	2E	Groves, J.T., et al., "Hydroxylation by Cytochrome P-450 and Metalloporphyrin Models. Evidence for Allylic Rearrangement," J. AM. CHEM. SOC., (1984) 106: 2177-81
msy	2F	Guengerich, F. P., et al., "Role of Human Cytochrome P-450 IIE1 in the Oxidation of Many Low Molecular Weight Cancer Suspects," CHEM. RES. TOXICOL., (1991) 4:168-79
msy	2G	Guengerich, F. P., et al., "Evidence for a 1-Electron Oxidation Mechanism in N-Dealkylation of N,N-Dialkylanilines by Cytochrome P450 2B1," J. BIOL. CHEM., (1996) 271(44):27321-9
msy	2H	Hammond, G. S., "A Correlation of Reaction Rates," J. AM. CHEM. SOC., (1955) 77(2):334-40
msy	2I	Hanzlik, R.P., et al., "Intramolecular Kinetic Deuterium Isotope Effects on Microsomal Hydroxylation and Chemical Chlorination of Toluene-a-d1 and Toluene-a,a-d2," J. AM. CHEM. SOC., (1985) 107:7164-7
msy	2J	Harada, N., et al., "Kinetic Isotope Effects on Cytochrome P-450-Catalyzed Oxidation Reaction," J. BIOL. CHEM., (1984) 259(5):3005-10
msy	2K	Hasemann, C.A., et al., "Structure and Function of Cytochromes P450: A Comparative Analysis of Three Crystal Structures," STRUCTURE, (1995) 3(1):41-62
msy	2L	Hasemann, C.A., et al., "Crystal Structure and Refinement of Cytochrome P450terp at 2-3 Å Resolution," J. MOL. BIOL., (1994) 236:1169-85
Examiner	MG Moran	
Date Considered	4/15/03	

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Keady Pg. 2 of 7 Jan 29, 2004



Form 1449 (Modified)	Atty Docket No. CAMIPOO5	Application No. 09/811,283
Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Applicant: Ewing et al.	
	Filing Date March 15, 2001	Group 1635/631

TECH CENTER 160012900
JUL 18 2001

RECEIVED

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	3A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	3B							

Other Documents

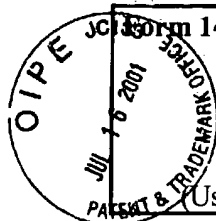
Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK msy	3C	Heberger, K., "Linear Free Energy Relationships in Radical Reactions. II Hydrogen Abstraction From Substituted Toluenes by TERT-Butyl, TERT-Butoxyl and Tert-Butylperoxyl Radicals," J. PHYS. ORG. CHEM., (1994) 7:244-50
AK msy	3D	Hermes, J.D., et al., "Use of Multiple Isotope Effects to Determine Enzyme Mechanisms and Intrinsic Isotope Effects. Malic Enzyme and Glucose-6-phosphate Dehydrogenase," BIOCHEMISTRY, (1982) 21:5106-1428
AK msy	3E	Hjelmeland, L. M., et al., "Intramolecular Determination of Primary Kinetic Isotope Effects in Hydroxylations Catalyzed by Cytochrome P-450," BIOCHEM. BIOPHYS. RES. COMMUN., (1977) 76:541-9
AK msy	3F	Jones, J. et al., "Predicting The Rates And Regioselectivity of Reactions Mediated By The P450 Superfamily," METHODS IN ENZYMOLOGY, (1996) 272:326-35
AK msy	3G	Jones, J. P., et al., "The Separation of the Intramolecular Isotope Effect for the Cytochrome P-450 Catalyzed Hydroxylation of n-Octane into Its Primary and Secondary Components," J. AM. CHEM. SOC., (1987) 109(7):2171-3
AK msy	3H	Jones, J.P., et al., "Stereospecific Activation of the Procarcinogen Benzo[a]pyrene: A Probe for the Active Sites of the Cytochrome P450 Superfamily," BIOCHEMISTRY, 1995, 34:6956-61
AK msy	3I	Jones, J.P., et al., "The Binding and Regioselectivity of Reaction of (R)- and (S)-Nicotine with Cytochrome P-450cam: Parallel Experimental and Theoretical Studies," J. AM. CHEM. SOC., (1993) 115:381-7
AK msy	3J	Jones, J.P., et al., Accelerated Communication: Three Dimensional Quantitative Structure- Activity Relationship for Inhibitors of Cytochrome P4502C9," (1996) DRUG METAB. DISPOS., 24(1):1-6
AK msy	3K	Karki, S.B., et al., "On the Mechanism of Amine Oxidations by P450," Xenobiotica, (1995), 25(7):711-24
Examiner	M G Moran	
Date Considered	4/15/03	

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy

Pg. 3 of 7

Jan 29, 2004



Form 1449 (Modified)

Information Disclosure
Statement By Applicant

(Use Several Sheets if Necessary)

Atty Docket No.
CAMIPOO5Applicant:
Ewing et al.Filing Date
March 15, 2001Application No.:
09/811,283Group
1635 1631 JUL 18 2001

RECEIVED

TECH CENTER 1600/2900

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	4A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	4B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK	4C	Karki, S.B., et al., "Mechanism of Oxidative Amine Dealkylation of Substituted N,N-Dimethylanilines by Cytochrome P-450: Application of Isotope Effect Profiles," J. AM. CHEM. SOC., (1995) 117(13):3657-64
AK	4D	Kim, S.S.; et al., "Comparative Hammett Studies of Imidoyl, Benzylic, Aldehydic Hydrogens Transfer and Related Reaction by t-Butoxyl Radical," TETRAHEDRON LETT., (1985) 26(7): 891-4
AK	4E	Kobayashi, Y., et al., "Probing the Active Site of Cytochrome P450 2B1: Metabolism of 7-Alkoxy coumarins by the Wild Type and Five Site-Directed Mutants," BIOCHEMISTRY, (1998) 37(19):6679-88
AK	4F	Korzekwa, K. R., et al., "Theoretical Studies on Cytochrome P-450 Mediated Hydroxylation: A Predictive Model for Hydrogen Atom Abstraction," J. AM. CHEM. SOC., (1990) 112:7042-6
AK	4G	Korzekwa, K., et al., "The Use of Brauman's Least Squares Approach for the Quantification of Deuterated Chlorophenols," BIOMED. & ENVIRON. MASS SPECTROM., (1990) 19:211-7
AK	4H	Korzekwa, K.R., et al., "Predicting the Cytochrome P450 Mediated Metabolism of Xenobiotics," PHARMACOGENETICS, (1993) 3:1-18
AK	4I	Lindsay Smith, J.R., et al., "Model Systems for Cytochrome P450 Dependent Mono-Oxygenases. Part 2. ¹² Kinetic Isotope Effects for the Oxidative Demethylation of Anisole and [Me- ² H ₃] Anisole by Cytochrome P450 Dependent Mono-Oxygenases and Model Systems," J. CHEM. SOC. PERKIN TRANS. II, (1983) 5:621-8
AK	4J	Macdonald, T. L., et al., "Oxidation of Substituted N,N-Dimethylanilines by Cytochrome P-450: Estimation of the Effective Oxidation-Reduction Potential of Cytochrome P-450," (1989) BIOCHEMISTRY, 28:2071-7
Examiner		MA Moran
Date Considered		4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kinsky

Pg. 4 of 7

Jan 29, 2004



Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No. CAMIPOO5	Application No.: 09/811,283
	RECEIVED	
	Applicant: Ewing et al.	Group 163/ JUL 18 2001
	Filing Date March 15, 2001	4635 TECH CENTER 1600/290

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
	5A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub- class	Translation	
							Yes	No
	5B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK	5C	Manchester, J.I., et al., "A New Mechanistic Probe for Cytochrome P450: An Application of Isotope Effect Profiles," J. AM. CHEM. SOC., (1997) 119:5069-70
AK	5D	Nelson, D.R., et al., P450 Superfamily: Update on New Sequences, Gene Mapping, Accession Numbers and Nomenclature," PHARMACOGENETICS, (1996) 6:1-42
AK	5E	Northrop, D.B., "Deuterium and Tritium Kinetic Isotope Effects on Initial Rates," METHODS ENZYMOL., (1982) 87:607-25
AK	5F	Northrop, D.B., "Steady-State Analysis of Kinetic Isotope Effects in Enzymic Reactions," Biochemistry, (1975) 14(12):2644-51
AK	5G	Omura, T., et al., "The Carbon Monoxide-Binding Pigment of Liver Microsomes," J. BIOL. CHEM., (1964) 239(7):2370-8
AK	5H	Poulos, T. L., et al., "High-Resolution Crystal Structure of CytochromeP450cam," J. MOL. BIOL., (1987) 195:687-700
AK	5I	Ravichandran, K. G., et al., "Crystal Structure of Hemoprotein Domain of P450BM-3, a Prototype for Microsomal P450's," SCIENCE, (1993) 261:731-6
AK	5J	Sakurai, H., et al., "Polar and Solvent Effects on Homolytic Abstraction of Benzylic Hydrogen of Substituted Toluenes by t-Butoxy Radical," J. AM. CHEM. SOC., (1967) 89(2):458-60
AK	5K	Shimoji, M., et al., "Design of a Novel P450: A Functional Bacterial--Human Cytochrome P450 Chimera," BIOCHEMISTRY, (1998) 37:8848-52
AK	5L	Silver, E.H., et al., "Structural Considerations in the Metabolism of Nitriles to Cyanide In Vivo," DRUG METAB. DISPOS., (1982) 10(5):495-8
AK	5M	Smith, P. B., et al., "4-Ipomeanol and 2 Aminoanthracene Cytotoxicity in C3H11OT112 Cells Expressing Rabbit Cytochrome P450 4B1," BIOCHEM. PHARMACOL., (1995) 50(10):1567-75
Examiner <i>Ma Moran</i>		Date Considered <i>4/15/03</i>

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy Pg. 5 of 7 *Jan 29, 2004*



Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No. CAMIPOO5	Application No. 09/811,283
	Applicant: Ewing et al.	
	Filing Date March 15, 2001	Group 1635-1631
	TECH CENTER 1600/2900	

RECEIVED

JUL 18 2001

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	6A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	6B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK	6C	Szklarz, G. D., et al., "Site-Directed Mutagenesis as a Tool for Molecular Modeling of Cytochrome P450 2B1," BIOCHEMISTRY, (1995) 34:14312-22
AK	6D	Tassaneeyakul, W., et al., "Human Cytochrome P450 Isoform Specificity in the Regioselective Metabolism of Toluene and o-, m- and p-Xylene," J. PHARMACOL. EXP. THER., (1996) 276(1):101-8
AK	6E	Tyson, C. A., et al., "The Roles of Putidaredoxin and P450cam in Methylene Hydroxylation," J. BIOL. CHEM., (1972) 247(18):5777-84
AK	6F	Watanabe, Y., et al., "Kinetic Study on Enzymatic S-Oxygenation Promoted by a Reconstituted System with Purified Cytochrome P-450," TETRAHEDRON LETT., (1980) 21:3685-8
AK	6G	Westheimer, F. H., "The Magnitude of the Primary Kinetic Isotope Effect for Compounds of Hydrogen and Deuterium," CHEM. REV., (1961) 61(3):265-73
AK	6H	White, R. E., et al., "Oxygen Activation by Cytochrome P-450," ANN. REV. OF BIOCHEM., (1980) 49:315-56
AK	6I	White, R.E., et al., "Active Site Mechanics of Liver Microsomal Cytochrome P-450," ARCH. BIOCHEM. BIOPHYS., (1986) 246(1):19-32
AK	6J	White, R.E., et al., "Stereochemical Dynamics of Aliphatic Hydroxylation by Cytochrome P-450," J. AM. CHEM. SOC., (1986) 108: 6024-31
AK	6K	Wislocki, P.G., et al., "Reactions Catalyzed by the Cytochrome P-450 System," ENZYMOLOGICAL BASIS OF DETOXICATION, (1980) 1:135-82
AK	6L	Yin, H., et al., "Designing Safer Chemicals: Predicting the Rates of Metabolism of Halogenated Alkanes," PROC. NATL. ACAD. SCI. USA, (1995) 92(24):11076-80
AK	6M	Zerner, Michael C., "Semiempirical Molecular Orbital Methods," REVIEWS IN COMPUTATIONAL CHEMISTRY II, Chapter 8, 313-365 (1991)
Examiner	M G Moran	
	Date Considered	4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy

Pg. 6 of 7

Jan 29, 2004



Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No. CAMIPOO5	Application No. 09/811,283
	Applicant: Ewing et al.	
	Filing Date March 15, 2001	Group 1635/631

TECH CENTER 1600/2900

JUL 16 2001

RECEIVED

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	7A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	7B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK	7C	International Search Report for PCT/LTS99/17713 dated 11 November 1999
AK	7D	Abstract No. XP-002122407, P84 to Johnson et al., "Automated Modeling Predicts Active Site Geometries Consistent with the Regiospecificity of P450s 2C3v and 2C5 for Progesterone Hydroxylation," FASEB Journal 11(9):P785 (1997)
AK	7E	Korzekwa and Gillette, "Overview: Theoretical Aspects of Isotope Effects on the Pattern of Metabolites Formed by Cytochrome P-450," Biological Reactive Intermediates IV, Witmer et al., Eds. Plenum Press, NY (1990)
AK	7F	Korzekwa et al., "Theory for the Observed Isotope Effects from Enzymatic Systems that Form Multiple Products via Branched Reaction Pathways: Cytochrome P-450," Biochemistry 28: 9012 (1989).
	7G	
	7H	
	7I	
	7J	
	7K	
Examiner <i>MA Moran</i>		Date Considered <i>4/15/03</i>

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kearsley

Pg. 7 of 7

Jan 29, 2004